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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT PAPER NUMBER

2666

DATE MAILED: 11/10/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/305,452

Applicant(s)

ASO ET AL.

Examiner

Melanie Jagannathan

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003 and 01 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Please cancel **non-elected claims 1-5.**

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed subject matter particular data terminal device and particular input line is not described in the specification as to convey that inventor had possession of claimed invention. Specification recites communication between DTE 30A and 30B but it is not clear where it is indicated about a particular data terminal device communicating over particular input line.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 6, 7, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel et al. U.S. Patent Number 5,748,615 in view of McDonald et al. U.S. Patent Number 6,442,166. Referring to claims 6, 8-10, the claimed means for controlling the switching of a plurality of lines in a line-switching unit is disclosed by Riedel et al. where a line unit (see Figure 1, element AE) is connected to input trunks (elements E1 to En) in a switching network (see Figure 1, element SN). The claimed means for storing data transmitted to the line-switching unit is disclosed by a memory means (see Figure 2, element CM) in handling means (element BHE) where a memory area is provided for each connection. See column 7, lines 47-51. The claimed means for allocating data from data terminal device to plurality of output lines is disclosed by handling means (Figure 1, element BHE) allocated to each serving trunk A1...An for forwarding message cells from inputs to the respective output line arrangement. See column 4, lines 22-25.

The reference Riedel et al. discloses all the limitations of the claim except for a line unit comprising a means for separately controlling a clock signal for transmitting data and a clock signal for receiving data. McDonald et al. disclose a network including a clock to calculate timing when the data is transmitted and when the data is received in order to determine lateness

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of the head-of-the-line cell for each connection. See column 2, lines 1-14. The determining of the cell lateness comprises a step of calculating a time deviation for a cell which can be calculated either when the cell arrives or when it is scheduled to leave. The clock for transmitting data is anticipated by the time deviation for a cell being calculated when the cell is scheduled to leave and the clock for receiving data is anticipated by the time deviation for a cell being calculated when the cell arrives. See column 2, lines 32-46 and column 3, lines 6-19. The timing at cell transmission and at cell arrival is needed. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to calculate timing when the data is transmitted and when the data is received. One of ordinary skill in the art would be motivated to do this as it allows for proper flow control and maintains the synchronization of the system.

Riedel et al. discloses all the limitations of the claim except for a means for measuring a line delay time of a plurality of lines in the line unit, the data being transmitted to the plurality of lines by a timing determined for each of the plurality of lines. McDonald et al. disclose a method including means of measuring the lateness of the head-of-the-line cell for each connection and transferring this information to a scheduler where it is stored in order to identify the latest cell. The method includes transmitting the outgoing cells according to the lateness estimated by the lateness estimator (Figure 1, element 1). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to measure the line delay time and transmit the data according to the measured delay. One of ordinary skill in the art would be motivated to do this since it prevents loss of data and maintains performance of the system.

Referring to claim 7, Riedel et al. disclose all the limitations of the claim except for a line-switching unit including a clock signal for transmitting data to plurality of lines that is

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controlled to correspond to the line speed when receiving data from the line. McDonald et al. disclose a network where the lateness of the head-of-the-line cell is measured according to a Variation Fluctuation Smooth algorithm (VFS). This algorithm comprises synchronizing inter-departure times of cells according to DS1 rate. See column 4, lines 50-59. The clock times for each DS1 stream are uniformly spread over the DS1 assembly time. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have the transmission clock controlled to correspond to the line speed. One of ordinary skill in the art would be motivated to do this since it allows for the rate to be increased or decreased if needed.

Response to Arguments

6. Applicant's arguments filed March 17, 2003 have been fully considered but are moot in view of new grounds of rejection. Examiner appreciates detailed description of prior art Riedel et al.

Regarding claim 6, Applicant argues Riedel et al. does not disclose storing of the data. Examiner contends Riedel et al. disclose in Figure 2, a central cell memory for the handling means BHE that is supplied with message cells of different virtual connections and outputs to the A1..An. See column 5, lines 1-12.

Applicant argues reference Riedel et al. does not disclose allocating data to a plurality of output lines. However, Riedel et al. discloses handling means (Figure 1, element BHE) allocated to each serving trunk A1...An for forwarding message cells to the respective output line arrangement. See column 4, lines 22-25.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078.

The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Melanie Jagannathan
Patent Examiner
AU 2666

MJ

MS

For Seema S. Rao
Jul Ony
FRANK DOONG